

MOTOR UNIT INCLUDING INTEGRATED MOTOR AND SPEED REDUCTION MECHANISM

Technical Field

[0001] The present invention relates to a motor unit integrating a motor with a speed reduction mechanism or a control circuit. More particularly, the invention relates to a motor unit to be used as a drive source of, e.g., a wiper or slide door of an automobile.

Background Art

[0002] Conventionally, in a windshield wiper unit for wiping the front glass of a car, a system that activates a wiper arm by a link mechanism with a motor used as a drive source has been widely employed. As the function of the wiper system becomes more refined, a system that electrically controls a motor to thereby control the wiper movement has widely appeared in recent years in place of the above link drive system. In this motor control drive system, a configuration in which a control circuit and motor are integrated with each other is adopted in terms of product modulation or the like. For example, as disclosed in PCT Application Laid-open Publication No. 2002-511038, a motor is mounted in an automobile as a unit including a speed reduction mechanism.

[0003] In such a motor unit, however, a control circuit section is two-dimensionally arranged in a housing, and circuit components are two-dimensionally placed on the control circuit section, thereby